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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/885,617

06/20/2001

Siegfried Bocionek

P01,0208

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09/06/2005

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EXAMINER

EDWARDS, PATRICK L

ART UNIT

PAPER NUMBER

2621

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/885,617

Applicant(s)

BOCIONEK, SIEGFRIED

Examiner

Patrick L. Edwards

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2621

DETAILED ACTION

1. The response received on 27 January 2005 has been placed in the file and was considered by the examiner. An action on the merits follows.

Response to Arguments

2. The arguments filed on 27 January 2005 have been fully considered. A response to these arguments is provided below.

Information Disclosure Statement

Summary of Argument:

In the previous office action, the examiner requested a cited article that appeared to be extremely pertinent to the prosecution of the application. Applicant failed to provide the article and cites the payment of a fee as one of the reasons why. (remarks, pg. 7).

Examiner's Response:

This article is pertinent to the prosecution of the application. The examiner would like to respectfully renew the previous request.

Drawing Objections

Summary of Argument:

Figure 1 has been amended in order to provide readily identifiable descriptors.

Examiner's Response:

The prior objection is hereby withdrawn.

37 CFR 1.75 Claim Objections

Summary of Argument:

Applicant has amended claims 1, 4, and 5 in response to the claim objections set forth in the previous office action. Applicant argues that these amendments have overcome the objections.

Examiner's Response:

The examiner agrees. The prior claim objections are hereby withdrawn.

Prior Art Rejections

Summary of Argument:

(a) Applicant alleges that the Herzog reference does not disclose "display[ing] the retrieved image in a window together with the examination image." (remarks, pg. 9).

Art Unit: 2621

(b) Applicant advances the above argument with respect to the Herzog reference, and then alleges that “The same is true of the Kraft reference.” (remarks, pg. 9).

(c) Applicant alleges that the Alexandrescu reference fails to disclose, teach, or suggest mixing images together, or displaying one image in a window together with another image. (remarks, pg. 9).

Examiner's Response:

(a) The examiner would like to respectfully remind applicant that the rejection was based on a combination of references, not a single reference standing alone. Herzog is used as the base reference in the rejection of claim 1, but it is not relied upon to teach the feature that applicant alleges it lacks. Indeed, the previous office action expressly cited this particular feature as a Herzog deficiency. Applicant's statements regarding the Herzog reference are entirely accurate, but irrelevant.

(b) The examiner disagrees. Applicant's bald assertion about Kraft is in stark contrast to the examiner's analysis of the claim—which was provided in the previous office action and will be repeated in the below rejection. If applicant is of the opinion that the examiner has misinterpreted the Kraft reference, then the examiner would like to respectfully extend applicant an invitation to persuasively present arguments to that end. As it currently stands, applicant's arguments are unpersuasive.

Further, applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

(c) The above response to argument (a) also applies herein. The Alexandrescu reference was not used to meet the limitation that applicant alleges it lacks. Accordingly, applicant's argument is irrelevant.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Herzog (DE 198 02 572 A1) and Kraft (U.S. Patent No. 6,370,420 B1), and further in combination with Alexandrescu (DE 197 43 500 A1). (Note: The corresponding U.S. cases of the German references, U.S. Patent No. 6,241,668 B1 and U.S. Patent No. 6,272,368 B1, respectively, have been provided and used as a translation of the German references; however, the rejection is based on the German references.)

Art Unit: 2621

As applied to claim 1, Herzog discloses a medical system architecture comprising: at least one modality for acquiring an examination image of a subject (see Fig. 1: Reference numerals 1, 2, 3, and 4 referring to a CT unit, an MR unit, a DSA unit, and an X-ray unit, respectively.); a processing apparatus connected to said modality for processing said examination image (see Fig. 1 and column 2, lines 26-29 of U.S. Patent No. 6,241,668 B1: The reference describes workstations 5 to 8 that are connected to each modality and are used for processing the examination images.); a storage system for storing said examination image (see Fig. 1: Reference numeral 10 referring to an image archiving system.); a post-processing device for post-processing said examination image (see Fig. 1: Reference numeral 11 referring to workstations (i.e. post-processing devices).); a communication network operating according to a DICOM standard for exchanging data representing at least said examination image among said processing apparatus, said storage apparatus and said post-processing device (see Fig. 1 and column 2, lines 52-57 of U.S. Patent No. 6,241,668 B1: The reference describes an image communication network 9 that operates according to the DICOM standard. As can be seen in Fig. 1, workstations 5-8 (i.e. processing apparatus), workstations 11 (i.e. post-processing device), and image archiving system 10 (i.e. storage apparatus).); and said processing apparatus having a viewing monitor on which said examination image is displayed (see Fig. 1: As can be seen in the figure, each workstation 5-8 (i.e. processing apparatus) has a viewing monitor.).

As applied to claim 3, Herzog discloses that the post-processing device has a viewing monitor (see Fig. 1: As can be seen in the figure, each workstation 11 (i.e. post-processing device) has a viewing monitor.).

As applied to claim 4, Herzog discloses a camera at said post-processing device having a field of view for producing at least one still image of an environment of said post-processing device (see Fig. 1: Reference numeral 14 referring to a digital photographic camera connected to workstation 11 (i.e. post-processing device).).

As applied to claim 5, which calls for two post-processing devices each having a camera, Herzog discloses such a feature (see Fig. 1: The reference calls for the medical system architecture to have two post-processing devices see workstations 11 each with a viewing monitor and a camera (reference numerals 14 and 15, respectively)).

Claim 1 also calls for:

A) a camera having a field of view encompassing the modality for producing at least one still image of the modality, the camera being connected to the processing device;
and

claims 1 and 3-5 call for:

B) the processing apparatus to mix the at least one still image of the modality (or environment) into the examination image in a separate window on the viewing monitor.

Herzog does not teach features A) and B).

Regarding A), Alexandrescu, in the same field of endeavor of image processing, and the same problem solving area of medical imaging system architecture, discloses a camera having a field of view encompassing the modality for producing at least one still image of the modality (see Fig. 1: As can be seen in the figure, the reference describes a system that has a camera 13 with a field of view that encompasses the imaging modality, in

Art Unit: 2621

this case an X-ray device.), the camera being connected to the processing apparatus (see Fig. 1: As can be seen from the figure, the camera is connected to an evaluation unit (i.e. processing apparatus).

As applied to claim 2, Alexandrescu discloses that camera produces a sequence of still images of the imaging modality (see column 3, lines 28-29 of U.S. Patent No. 6,272,368 B1: The reference describes that the camera 13 can be a video camera. A video camera produces a sequence of still images.).

As applied to claim 6, Alexandrescu discloses that the camera is a digital camera (see column 3, lines 28-29 of U.S. Patent No. 6,272,368 B1: The reference describes that the camera 13 can be a CCD camera (i.e. a digital camera)).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Herzog by adding the use of a camera that has a field of view encompassing the modality for producing an image of the modality as taught in Alexandrescu because the use of such a modality because the use of such a camera allows for the monitoring and prevention of "collisions of components of the medical devices with one another as well as collisions with unknown objects freely movable in space, for example with persons" (see Alexandrescu (U.S. Patent No. 6,272,368 B1): column 1, lines 56-58).

Regarding difference B), Kraft, in the same field of endeavor of image processing, and the same problem solving area of medical imaging system architecture, discloses a system with a processing apparatus that mixes the at least one still image of a patient into the examination image in a separate window on the viewing monitor (see Fig. 4: As can be seen in the figure, the examination image 54 is mixed with an image of the patient 44 in a separate window on the viewing monitor 72.).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Herzog and Alexandrescu by adding the ability to mix an image of the medical imaging environment with an examination image in a separate window on a viewing monitor as taught in Kraft because the use of such processing steps allows the medical professional to "be able to access all the relevant information without viewing numerous displays or switching between input channels on a display" (see Kraft: column 3, lines 19-21.).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2621

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick L Edwards whose telephone number is (571) 272-7390. The examiner can normally be reached on 8:30am - 5:00pm M-F.

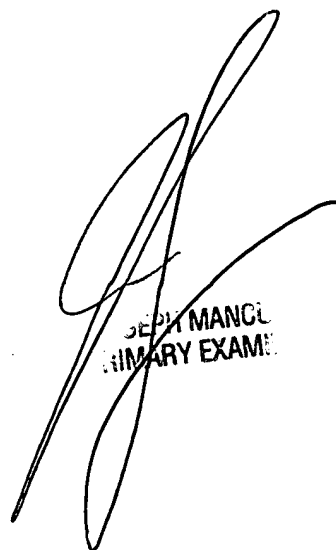
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Mancuso can be reached on (571) 272-7695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patrick L Edwards

Art Unit 2621

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JOE MANCUSO
PRIMARY EXAMINER